UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/690,393	10/17/2000	Matthew Squire	2204/A19	3271

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EXAMINER
SALAD, ABDULLAHI ELMI

ART UNIT	PAPER NUMBER
2157	

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>10 May 2005</u>.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-23* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-23* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on

5/10/2005 has been entered.

Response to Arguments

2.   Applicant's arguments with respect to claims 1-23 filed 5/10/2005 have been fully

considered but they are moot in view of new grounds of rejection

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed
> or described as set forth in section 102 of this title, if the differences between the
> subject matter sought to be patented and the prior art are such that the subject
> matter as a whole would have been obvious at the time the invention was made
> to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was
> made.

4.   Claims 1-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Tappan et al., U.S. Patent No. 6,603,756[Tappan] in view of Ayandeh U.S. Patent No.

6,069,895 [hereinafter Ayandeh].

As per claim 1, Tappan discloses a method for distributing routing information

through a plurality of network devices (see fig. 6, elements I-ASBR, TR1A, TR1B, ABR1

etc) the plurality of network devices being members of domain having a defined policy

relating forwarding of routing information, the method comprising:

receiving, from outside the domain (external domain or external source i.e. router S), an

information message at a network device (I-ASBR), in the domain, the information

message having routing information (see fig. 6, and col. 6, lines 16-27); and

flooding the filtered routing information to each of the plurality of network devices (see

col. 8, line 51 to col. 9, line 25).

Tappan is silent regarding:

> modifying the routing information for forwarding to a peer network device internal
>
> to the domain, by adding a local preference attribute to the routing information,
>
> the local preferences attribute is selected by the network device

Ayandeh discloses in an analogous art discloses a method for propagating routing

information to its neighboring router including modifying the routing information for

forwarding to a peer network device internal to the domain, by adding a local preference

attribute to the routing information, the local preferences attribute is selected by the

network device (i.e., identifying any changes and applying appropriate routing policies)

a received routing information using predetermined policy (see col. 4, lines 30-64).

Therefore, it would have been obvious to one having ordinary skill in the art at the time

of the invention to incorporate the teaching of Ayandeh such as modifying the routing

information by applying a given policy to allow selective generation of routing update

messages (i.e., filtered) by an inter-domain router for its neighboring peer routers within autonomous systems to avoid generation of unnecessary routing updates in order to preserve network bandwidth utilization [see col. 3, lines 5-10].

In considering claim 2, Tappan discloses the method as defined by claim 1, wherein the pluralities of network devices are in a ring connectivity(see fig. 6).

In considering claim 3, Tappan discloses the method as defined by claim 1, wherein the plurality of network devices comprises at least three network devices, the at least three network devices including a given network device that is connected with no more than one other of the plurality of network devices (see fig. 6, elements in the domain 44).

In considering claim 4,Tappan discloses the method as defined by claim 1, wherein the act of flooding comprises adding a link state advertisement header to the policy filtered routing information (see fig. 7, and col. 7, lines 6-60).

In considering claim 5, Tappan discloses the method as defined by claim 1, wherein the policy filtered routing information comprises the received routing information in the information message (col. 5, line 65 to col. 6, line 54).

In considering claim 6, Tappan discloses the method as defined by claim 1, further comprising storing the routing information in local data storage (see col. 1, lines 23-38).

In considering claim 7, Ayandeh discloses the method as defined by claim, wherein the given policy is set by an administrator (see col. 6, line 50 to col. 7, line 2).

As per claim 8, Tappan disclose discloses an apparatus for distributing routing information through a plurality of network devices, the plurality of network devices being members of a single domain, each of the network devices operating in accord with given policy relating to routing information, the method comprising:

receiving, from outside the domain (external domain or external source i.e. router S), an information message at one of the network devices (I-ASBR), the information message having routing information (see fig. 6, and col. 5, line 65 to col. 6, line 54); and

flooding the policy filtered routing information to each of the plurality of network devices (see col. 8, line 51 to col. 9, line 25).

Tappan is silent regarding: modifying the routing information for forwarding to a peer network device internal to the domain, by adding a local preference attribute to the routing information, the local preferences attribute is selected by the network device.

Ayandeh discloses in an analogous art discloses a method for propagating routing information to its neighboring router including modifying the routing information for forwarding to a peer network device internal to the domain, by adding a local preference attribute to the routing information, the local preferences attribute is selected by the network device (see col. 4, lines 30-64).Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to incorporate the teaching of Ayandeh such as modifying the routing information by applying a given policy to allow

selective generation of routing update messages (i.e., filtered) by an inter-domain router

for its neighboring peer routers within autonomous systems to avoid generation of

unnecessary routing updates in order to preserve network bandwidth utilization.

In considering claim 9, Tappan discloses the apparatus as defined by claim 8, wherein

the plurality of network devices are in a ring connectivity(see fig. 6).

In considering claim 10, Tappan discloses the apparatus as defined by claim 8, wherein

the plurality of network devices comprises at least three network devices, the at least

three network devices including a given network device that is connected with no more

than one other of the plurality of network devices (see fig. 6, elements in the domain

44).

In considering claim 11, Tappan discloses the apparatus as defined by claim 8, wherein

the act of flooding comprises adding a link state advertisement header to the policy

filtered routing information (see fig. 7, and col. 7, lines 6-60).

In considering claim 12, Tappan discloses the apparatus as defined by claim 8, wherein

the policy filtered routing information comprises the received routing information in the

information message (col. 5, line 65 to col. 6, line 54).

In considering claim 13, Tappan discloses the apparatus as defined by claim 8, further

comprising storing the routing information in local data storage (see col. 1, lines 23-38).

In considering claim 14, Tappan discloses the apparatus as defined by claim 8, wherein

the given policy is set by an administrator (commonly administered network shows the

given policy is set by an administrator)(see col. 4, line 60 to col. 5, line 35).

As per claim 15, Tappan disclose a program product for use in a network device in first

domain of network devices, the computer program product comprising a computer

usable medium having computer readable program code thereon, the computer

readable product code comprising:

a program code for receiving an information message the information message having

routing information (see fig. 6, and col. 5, line 65 to col. 6, line 54);

a program code for applying the given policy (i.e. the policy of the domain 44) of the

network device that received the information message to the routing information in the

information message to produce policy filtered routing information (see col. 5, line 65 to

col. 6, line 54); and

a program code for flooding the policy filtered routing information to each of the plurality

of network devices (see col. 8, line 51 to col. 9, line 25).

Tappan is silent regarding: a program code for modifying the routing information for

forwarding to a peer network device internal to the domain, by adding a local preference

attribute to the routing information, the local preferences attribute is selected by the

network device

Ayandeh discloses in an analogous art discloses a method for propagating routing

information to its neighboring router including modifying the routing information for

forwarding to a peer network device internal to the domain, by adding a local preference

attribute to the routing information, the local preferences attribute is selected by the

network device(see col. 4, lines 30-64).Therefore, it would have been obvious to one

having ordinary skill in the art at the time of the invention to incorporate the teaching of

Ayandeh such as modifying the routing information by applying a given policy to allow

selective generation of routing update messages (i.e., filtered) by an inter-domain router

for its neighboring peer routers within autonomous systems to avoid generation of

unnecessary routing updates in order to preserve network bandwidth utilization .

In considering claim 16, Tappan discloses the computer program product as defined by

claim 15, wherein the plurality of network devices are in a ring connectivity (see fig. 6).

In considering claim 17, Tappan discloses the computer program product as defined by

claim 15, wherein the plurality of network devices comprises at least three network

devices, the at least three network devices including a given network device that is

connected with no more than one other of the plurality of network devices (see fig. 6,

elements in the domain 44).

In considering claim 18, Tappan discloses the computer program product as defined by claim 15,wherein the act of flooding comprises adding a link state advertisement header to the policy filtered routing information (see fig. 7, and col. 7, lines 6-60).

In considering claim 19, Tappan discloses the computer program product as defined by claim 15,wherein the policy filtered routing information comprises the received routing information in the information message (col. 5, line 65 to col. 6, line 54).

In considering claim 20, Tappan discloses the computer program product as defined by claim 15, further comprising storing the routing information in local data storage (see col. 1, lines 23-38).

In considering claim 21 Tappan discloses the computer program product as defined by claim 15, wherein the given policy is set by an administrator (commonly administered network shows the given policy is set by an administrator)(see col. 4, line 60 to col. 5, line 35).

As per claim 22, Tappan discloses a network device (IASBR) in a first domain (44) operating in accord with given policy relating to routing information, the network device comprising:

an input coupled with a network device (router S) in a second domain (out side domain), the input receiving outside the domain (external domain or external source i.e., router

S), an information message at one of the network devices (I-ASBR), the information

message having routing information (see fig. 6, and col. 5, line 65 to col. 6, line 54);

modifying the routing by the network device that received the information message to

the routing information in the information message to produce policy filtered routing

information (see col. 5, line 65 to col. 6, line 54); and

flooding the policy filtered routing information to each of the plurality of network devices

(see col. 8, line 51 to col. 9, line 25).

Tappan is silent regarding: a policy module coupled with the input, the policy module

modifying the routing information for forwarding to a peer network device internal to the

domain, by adding a local preference attribute to the routing information, the local

preferences attribute is selected by the network device

Ayandeh discloses in an analogous art discloses a method for propagating routing

information to its neighboring router including modifying (i.e., updating) a received

routing information using predetermined policy (see col. 4, lines 30-64). Therefore, it

would have been obvious to one having ordinary skill in the art at the time of the

invention to incorporate the teaching of Ayandeh such as modifying the routing

information by applying a given policy to allow selective generation of routing update

messages (i.e., filtered) by an inter-domain router for its neighboring peer routers within

autonomous systems to avoid generation of unnecessary routing updates in order to

preserve network bandwidth utilization.

In considering claim 23,Tappan discloses the network device as defined by claim 22, further comprising a link state module for adding a link state advertisement header to the policy filtered routing information (see fig. 7, and col. 7, lines 6-60).

CONCLUSION

5. The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Salad E Abdullahi whose telephone number is 703-308-8441. The examiner can normally be reached on 8:30 - 5:00. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 703-305-4792. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Abdullahi Salad
Examiner Au 2157
6/23/2005